The St. John’s River Site:
Public Archaeology of the Troumassoid Period in Grenada, West Indies

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Abstract
The St. John’s River site is a Ceramic Age settlement on Grenada’s southwest coast, largely destroyed by the expansion of a public cemetery, stadium, and road bridge. The St. George’s Community Archeology Project (SGCAP) was a summer program developed to engage young people and community members in the investigation and preservation of the remaining site. During the summers of 2011 and 2012, surface collection, shovel testing, and four excavation pits were implemented in the area. The artifacts recovered fit mostly within Troumassoid period typology (AD 600-900), though local pastes, tempers, and paint combinations were observed. This paper summarizes the results of SGCAP and presents a template for a community-based approach that could be used for other archaeological sites in Grenada, such as the site of Pearls, where intermittent looting continues.

Site Background
Situated on the outskirts of Grenada’s capital, St. George’s, the St. John’s River site (SJR) in Queen’s Park has survived centuries of human disturbance (Slide 1). For example, Pierre Ozanne’s 1779 map of the French capture of the island from the British depicts structures on or near the site (possibly a white lime kiln) (Slide 2). Notice, too, the indigo facility, for which our shovel testing in 2011 (the red pins on the modern map) was unable to recover. Most of these STPs were terminated at a layer of gravel around 30cm below surface, so it is possible that remains of the facility still exist beneath heavy overburden.

Previous archaeological work has consisted solely of surface collections. Ripley Bullen first discovered the site in 1963 (Bullen 1964) and conducted a brief surface collection (Slide 3). In the mid-1980s, Thomas Banks and Ann Cody returned and collected artifacts on the coastal sections of the site (Cody and Banks 1986). Based on diagnostic ceramics, both teams concluded that the site dates to the late Saladoid to Saladoid-Barrancoid periods. Bullen, in fact, found mostly Pearls and Simon series (late Saladoid) ceramics and some diagnostic Suazey artifacts, but he specifically noted the lack of any Caliviny (Troumassoid) types present, leading him to believe a hiatus had occurred between the Early and Late Ceramic periods. The latter point is particularly confounding, as the present research shows the majority of artifacts recovered fit squarely within Bullen’s Caliviny typology.

Queen’s Park has been a cricket field and racecourse for the last century, with only minimal disturbance to the area. However, since 1999, major construction of two national stadiums, expansion of the St. George’s cemetery, and the erecting of a tyre shop on the edge of the cemetery have left the prehistoric site almost completely destroyed (Slides 4 & 5). During
construction of the cricket stadium, a new bridge was installed and a large workstone associated with the site was relocated to another part of Queen’s Park (Jessamy 2002). Upon inspection of the site in 2011, only a small strip appeared to be intact along the river, though that section suffered from land-crab disturbance.

Methods
Shovel testing, surface collection, and four excavation units (1x1m) were undertaken during the summers of 2011 and 2012 as part of the St. George’s Community Archaeology Project (SGCAP) (Slide 6). SGCAP aimed to get young people in the Queen’s Park vicinity interested in archaeology and draw connections to secondary school subjects like geometry, chemistry, technical drawing, surveying, and general science (Hanna and Jessamy 2012). Lab analysis by community college students occurred during 2012-2013 at the Grenada National Museum (GNM), where the artifacts are now stored.

A robust lab analysis was conducted on ceramics, which consisted of over 2500 sherds. No complete vessels were found, though some estimated vessel data were calculated. The majority of sherds exhibited use-wear and weathering, suggesting the excavated area was a midden, downslope from the main site (now devoured by the adjacent St. George’s Cemetery). Because of the sheer number of ceramics, individual analysis of each sherd was not possible. A “nine-pile” system was designed to sort each lot by surface finish (plain, slipped, and decorated) and temper size (fine, medium, coarse) (Slide 7). Plain sherds that were less than 3cm were counted but not sorted. A total of 42 attributes were recorded on standardized forms for each pile, including various temper inclusions, firing characteristics, rim types, paints, incisions, modelling, vessel thickness, and select vessel forms (e.g. griddles). Other artifacts like shell, bone, lithics, and limited historic artifacts (associated with the adjacent remains of an 18th century white lime kiln) were also systematically sorted and catalogued, but with far less attributes ascribed.

The data consists solely of counts (no weights were measured), but digital photographs were taken of all artifacts analyzed. Following completion of the lab analysis, the data were entered into an MS Access database, and all photographs were tagged with the appropriate metadata. A forthcoming site report will discuss these findings in greater detail (Hanna and Jessamy n.d.), and much of the data will be made publicly available on ScholarSphere, a digital repository maintained by Penn State University.1

Results of the St. John’s River Site Investigations
The Preliminary analysis of artifacts from the excavations suggest the site dates to the Troumassan-Troumassoid, a transition period between Saladooid-Barrancoid and Suazan-Troumassoid (Petersen et al. 2004). Vestiges of Saladoid types appear intermixed with characteristic “scratched” and “finger-indented” styles of later periods, including footed and triangular rim griddles (Slides 8 & 9). It is expected that radiocarbon dates (currently pending) will corroborate this assessment.

Generally, the assemblage appears highly diverse, with decorations varying from white-on-red (WOR) to black-incised, polychrome, and black-on-red styles (Slides 10 & 11). Adornos are present, though not as abundant as other, earlier sites on the island (e.g. Pearls). Though common

1 Archived files available at: https://scholarsphere.psu.edu/collections/ng451h51g
during this period, the high number of black-on-red styles may also be an adaptation to the high percentage of hornblende in local clay (Slide 12). As a proxy for vessel thickness, sherd thickness shows a clear preference for middle-range vessels of 5-10mm—a major characteristic of Bullen’s Caliviny series (Bullen 1964:48) (Slide 13). Additionally, the vast majority of sherds exhibited medium to coarse temper sizes, and while the majority were well-fired, a large number were either partially or wholly “unoxidized”/underfired (Slide 14).

No complete vessels were found, but reconstructed forms represented flaring and direct, unrestricted bowls, cazuelas, and a variety of griddle types ranging from direct to thickened rims (Slide 15). Upslope, larger ceramic sherds have been found, suggesting the main settlement was above the excavated area, where the cemetery, tyre shop, and bridge now stand. In July 2015, a small cache of ceramics was uncovered by the owners of the tyre shop and brought to the GNM (Slide 16). Had the vessels been excavated properly, they would likely have formed two complete pots. Negotiations with the landowners are currently under way for future investigations at the tyre shop.

Though proper faunal analysis has not yet been conducted, only a few bone fragments were found (Slide 17). The large abundance of marine shells indicates that shellfish was a major dietary staple at the site, as was likely root-crop horticulture (given the presence of griddles). The area is well suited for this kind of economy, with inshore pelagic fishing, adjacent coral reefs, a freshwater river, flat land, and fertile soils. The soil here is suitable for agriculture—an ash and agglomerate mixed with alluvial silts from the flooding river.

The effect of land crab turbation in the excavated area is still being considered. Upon survey in 2011, we noted the ubiquity of land crab holes and questioned whether the area was too badly mixed to be worth investigating. During excavation, however, three general strata were identified, with changes from a sandy clay loam (Stratum I) to clay loam with abundant shell/carbonate inclusions (Stratum II) to a very moist clay loam just above the water table (Stratum III). Of the 60 artifact characteristics quantified for this paper—whether ceramics, lithics, shell, or bone—60% (n=36) exhibited a decrease in Stratum II (Slide 18). This general depletion of artifacts from Stratum II could indicate a cessation in occupation, but we believe it may actually reflect the disturbance of land crabs, whereby the act of burrowing casts out objects from Stratum II into Stratum I. Though the exact species of crab is unknown (most likely of the red, Gecarcinus sp.), these crustaceans do not appear to be burrowing more than 60 cm in depth (Burggren and McMahon 1988; Groome 1970; Miculka 2009), potentially leaving Stratum III intact. If true, the differences in frequencies between Strata I and II are therefore unknown but presumed to be more equivalent than shown. As such, artifact attributes depicted from Stratum I generally conform to the same proportions as Stratum III.

Despite the mixing of artifacts in the top layers, the same proportions, types, and attributes are seen throughout the strata, suggesting that all the artifacts are from the same time period. It is possible that this mixing could be obscuring the presence of otherwise distinct Saladoid-Barrancoid and early Troumassoid strata, but given the frequencies of diagnostic attributes, we feel confident that the midden—if not the site itself—was formed during the transition following the Saladoid-Barrancoid period. Deposition of soils from biennial flooding of the St. John’s River could have rapidly buried artifacts during and after the midden’s formation. Indeed, severe
flooding in 2011 forced us to abandon our excavations, depositing roughly 7cm of soil accumulation when measured the following year. Thus, given the distribution of artifacts and the potential for rapid deposition, it appears likely that the St. John’s River site was a large yet short-lived settlement. An alternative interpretation, inspired by Cory Look’s paper from this conference, is that the present midden may represent only a snapshot of the site’s occupation, since changing settlement patterns over time can subsequently relocate midden deposits (Look 2015). Though surface collections throughout the adjacent cemetery conform to the ceramic types observed in the excavations, the small area investigated leaves this latter point a possibility.

Lessons for Community Archaeology
Though the St. George’s Community Archaeology Program was able to recover useful information about the quickly disappearing SJR site, perhaps the biggest success was its involvement with the surrounding community. Youth programs such as SGCAP present excellent avenues for public engagement (Haviser 2015). Indeed, this achievement offers an alternative use of highly disturbed sites as pedagogic tools for public engagement (Slide 19). That is, sites that may be rejected by investigators due to a perceived lack of merit are still valuable if approached from an educational standpoint. Awareness of archaeological sites and their value to the community are major obstacles for archaeologists around the world. By focusing on local youth, SGCAP was able to spread awareness and engender local support in a way that would not have been possible otherwise. Parents of participants told family, friends, and neighbors, triggering a ripple effect that maximized our impact on the community. Youth represent the future host-country counterparts for foreign archaeologists—they are the next generation of ministers, permanent secretaries, and historians that will ultimately design future cultural resource policies for their country. Youth archaeology programs, therefore, have enormous potential for the Caribbean, particularly areas suffering from looting, development, and erosion. We are now planning to use the SGCAP template for an island-wide survey of new and known sites, aimed at refining the chronology of Grenada. Special emphasis will be given to the site of Pearls, where decades of looting have irrevocably damaged the island’s most important site (Slide 20). In such a sensitive place as Pearls, archaeological investigations without community involvement would only strengthen the local perspective that artifacts have high monetary value (Derry and Malloy 2003). A robust plan to train and educate members of the community will be implemented here, as well as a development plan that would turn the site itself into a sustainable attraction for Grenadians and visitors alike. Such work has increasingly become important for archaeologists around the world (Gould and Burtenshaw 2014). SGCAP presents another example of how such a program of sustainable economic development and archaeological stewardship could be combined.

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Pierre Ozanne’s 1779 map of the French capture of the island (right), juxtaposed with a modern map of testing locations (left). Note the indigo facility, which our shovel testing was unable to recover.
William Cockburn’s (1763) drawing of Fort George from the north; the St. John’s River in the foreground

St. Johns River Site

Along the northern edge of St. George’s flows the St. Johns River. Here along the river banks are good but small fields suitable for agriculture. On land a little higher than the river valley is located the St. Johns River site (Fig. 1, 2), now part of a modern cemetery. In a short time we recorded the following surface collection:

<table>
<thead>
<tr>
<th>Suazy Series</th>
<th>Pearch Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shanked</td>
<td>Plug</td>
</tr>
<tr>
<td>Grooved</td>
<td>Rim Handle</td>
</tr>
<tr>
<td>Wide Handle</td>
<td>Rim Adorned</td>
</tr>
<tr>
<td>Bevel Line</td>
<td>Lower Rim Polished</td>
</tr>
<tr>
<td>Groove Line</td>
<td>Lower Rim Polished</td>
</tr>
<tr>
<td>Grooved</td>
<td>Polychrome</td>
</tr>
<tr>
<td>Total</td>
<td></td>
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</tbody>
</table>

We also found a polished hammer and part of a petrochemical.

Occupation during the Pears period plus a little use during the Suazy period is indicated. Again we have a correlation between the ceramics of the Pears period and good agricultural land. Lack of any Calivary Series sherds should be noted.

Bullen’s (1964) brief report on the site

Queen’s Park, St. George's.

Queen’s Park in the 1930s; arrow points to SJR

Slide 3

Stadium Construction and Workstone Relocation (c. 2000)

Slide 4
View from the bottom of the St. George’s Cemetery. The cemetery and a neighboring tyre shop (out of view, to the right), have overrun the main areas of the Amerindian site, leaving only small strips undisturbed along the river.

**Slide 5**

Shovel testing, surface collection, and four excavation units (1x1m) commenced during the 2011 and 2012 summers as part of the St. George’s Community Archaeology Project (SGCAP). The program was geared towards young people in the Queen’s Park vicinity, using archaeology as a practical application of subjects within the secondary school curriculum, such as geometry, chemistry, technical drawing, surveying, and general science.

**Slide 6**
Example of the “9-pile” sorting system used for ceramic analysis

Slide 7

Results

The ceramic styles recovered suggest a transition period between Saladoid-Barrancoid and Sauzan-Troumassoid (Petersen et al. 2004), where vestiges of Saladoid types are intermixed with characteristic “scratched” and “finger-indent” styles of later periods, including footed, triangular rim griddles.

Slide 8
Generally, the assemblage appears highly diverse, with decorations varying from WOR to black-incised, polychrome, and Black on Red styles. Adornos are present, though not as abundant as other, earlier sites on the island (e.g. Pearls).
Examples of typical Salado/Barrancoid ceramics recovered at SJR
(note remnant black-on-red decoration of some sherds)

Slide 11

Though common to the Troumassoid period, the high number of black-on-red styles may also be an adaptation to the high percentage of hornblende in local clay.

Slide 12
As a proxy for vessel thickness, sherd thickness counts show a clear preference for middle-range vessels of 5-10mm — a major characteristic of Bullen’s Calixtus series (Bullen 1964:48).

Additionally, the vast majority of sherds exhibited medium to coarse temper sizes...

...and while the majority were well-fired, a large number were either partially or wholly unoxidized.
No complete vessels were found, and the majority of sherdsh exhibited use-wear and weathering, suggesting the excavated area was likely a midden.

**Slide 15**

Upslope, larger ceramics have been found by previous investigators (Bullen 1964, Banks and Cody 1986), and more recently by the tyre shop owners, suggesting the main settlement was above, where the cemetery, shop, and bridge now stand.

Candid shots of thick, globular vessel exhibiting partial oxidation and remnant red and black paint, recently recovered by workers at the nearby tyre shop

**Slide 16**
Few faunal bones were found, indicating the dietary focus was shellfish and agriculture, for which the area is well-suited. Shell tools, too, far outweighed lithics.

Slide 17

Characteristics that show decrease in Stratum II

The effect of land-crab turbation in the area is still being considered. Of the 60 artifact characteristics analyzed, 36 (60%) exhibited a general depletion of artifacts from Stratum II, possibly reflecting land-crab mixing of Strata I and II. Stratum III still generally conforms to the proportions of Stratum I, however, suggesting that all the artifacts are from the same time period.

Slide 18
Slide 19

The SGCAP project plan has potential for areas suffering from looting and neglect

Open looting at the Pearls, Grenada archaeological site. This young man was asking for $500 XCD for the vessel he dug up. Many other objects were for sale as well.

Slide 20